

Bull. Natn. Sci. Mus., Tokyo, Ser. A, 10 (2), June 22, 1984

A New Species of the Genus *Paraxenos* (Strepsiptera, Stylopidae) from Palawan, the Philippines^{1,2)}

By

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(Communicated by Yoshihiko KUROSAWA)

Abstract

Paraxenos kurosawai sp. nov. (Strepsiptera, Stylopidae) parasitic on *Sphex* (*Sphex*) *madasummae* VAN DER VECHT (Hymenoptera, Sphecidae) collected in Palawan, the Philippines, is described on the adult female. A list of the Strepsiptera recorded from the Philippines is attached.

Through the courtesy of Dr. Yoshihiko KUROSAWA, National Science Museum, Tokyo, I was able to examine a stylopized wasp, *Sphex* (*Sphex*) *madasummae* VAN DER VECHT (Hymenoptera, Sphecidae), collected by him in Palawan Island, the Philippines. The wasp was parasitized by three females under the 4th tergite and two empty male puparia each under the 2nd and 3rd tergites of the abdomen (Fig. 1). Though no male adult was obtained, I have concluded that this is a new species of the genus *Paraxenos* SAUNDERS from the morphological characters of the female and of the first larva and its host preference.

Paraxenos kurosawai sp. nov.

(Figs. 1-3)

Female (Fig. 2). Color:— Cephalothorax brown, peripheral portion more darkened; abdomen almost whitish.

Size:— Cephalothorax 1.7–1.8 mm in length, 1.36–1.38 mm in maximum breadth, 1.14 mm in basal breadth at the junction to abdomen. Length of abdomen 7.5–9.2 mm under more or less stretched condition.

Structure:— Cephalothorax longer than broad, subtriangular; anterior margin rounded, oral portion more roundly protruded; lateral margins almost straight; broadest at a little anterior to spiracles; spiracles lateral, not remarkable in ventral view; postspiracular lateral margins gently narrowed to the abdominal junction; postjunc-

1) This study is supported by the Grant-in-Aid for Overseas Scientific Survey No. 304319 from the Ministry of Education, Science and Culture, Japan.

2) Notulae Strepsipterologicae—XIII.

tional portion slightly chitinized. Abdomen slender, cylindrical; contained less than one hundred first larva.

Male puparium. Cephalotheca lost, not observed. Remaining portion of puparium with typical form of the genus.

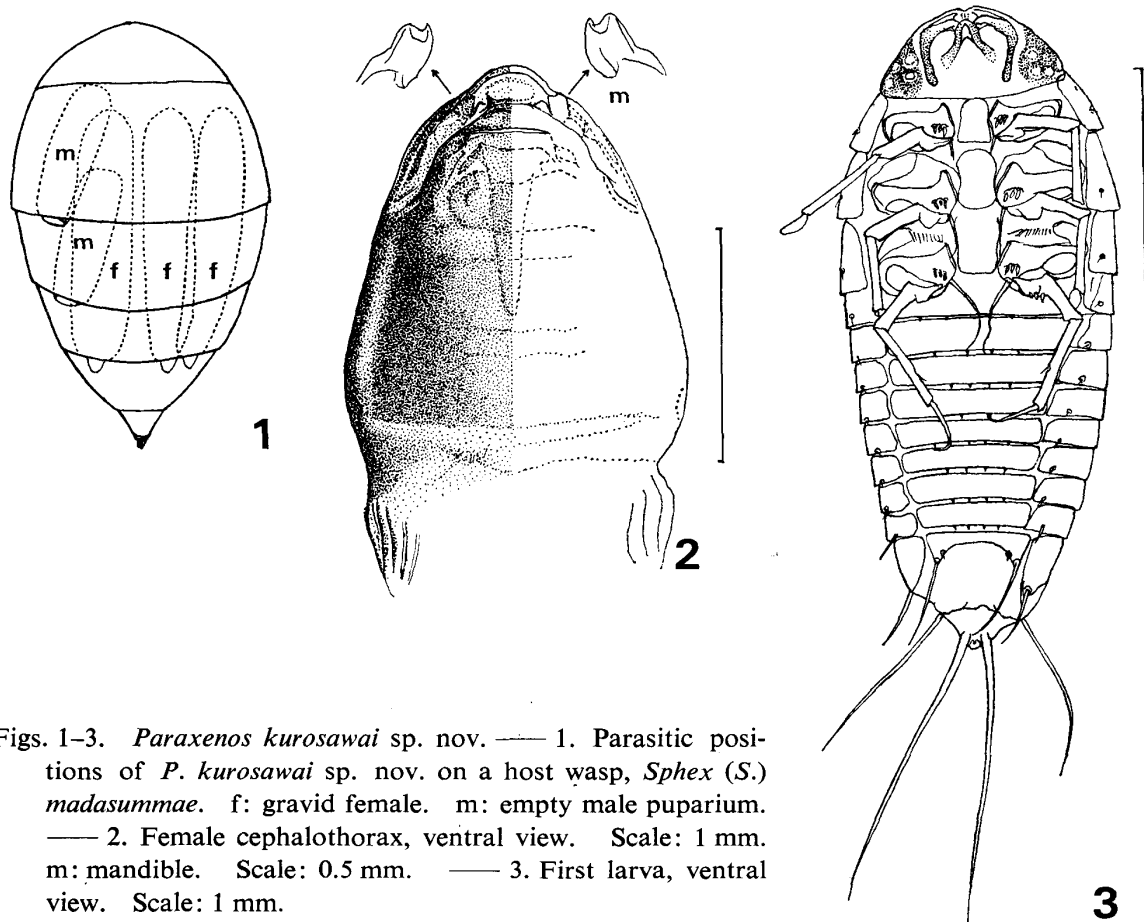
First larva (Fig. 3). Generally allied to the known congeneric species. Body elongated oval, 0.85 mm in length except setae; broadest at mesothoracic region, 0.36 mm in breadth; armored with each one pair of long caudal setae (0.39 mm in length) and of shorter subcaudal setae (0.24 mm in length) on the caudal segment. Other characteristics as illustrated in Fig. 3.

Male. Unknown.

Host. *Sphex* (*Sphex*) *madasummae* VAN DER VECHT, ♀ (Hymenoptera, Sphecidae) (identified by Mr. T. TANO).

Holotype. ♀, mounted together with an empty male puparium, *ex* a female of *Sphex* (*Sphex*) *madasummae* collected at Sabang C., Palawan, Philippines, July 12, 1977, Y. KUROSAWA leg.; 2 paratopotypes, one of them mounted together with another empty male puparium, from the same host as the holotype.

Specimens examined other than the type material. Many first larvae mounted



Figs. 1-3. *Paraxenos kurosawai* sp. nov. — 1. Parasitic positions of *P. kurosawai* sp. nov. on a host wasp, *Sphex* (*S.*) *madasummae*. f: gravid female. m: empty male puparium. — 2. Female cephalothorax, ventral view. Scale: 1 mm. m: mandible. Scale: 0.5 mm. — 3. First larva, ventral view. Scale: 1 mm.

together, extracted from a paratype.

Type depository. The holotype and 1 paratopotype female with a male puparium are deposited in the National Science Museum (Nat. Hist.), Tokyo. The remaining paratopotype is tentatively preserved in my private collection for the convenience of comparing with related species under study. This will be finally donated to the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka.

Discussion. This new species is generally allied to the congeneric species, but the shape of the cephalothorax which is rather long triangular is characteristic enough to be discriminated from other species. No such longitudinally elongated cephalothorax is observed in the known females of the congeneric species.

As the result of the present study, the following species of the Strepsiptera are known to occur in the Philippines.

A List of the Strepsiptera from the Philippines

(*Type locality)

Corioxenidae

Triozocerinae

1. *Triozocera boharti* LUNA DE CARVALHO, 1967 (♂) Mindanao*

Halictophagidae

Tridactylophaginae

2. *Tridactylophagus similis* KINZELBACH, 1971 (♂) Mindanao*

Halictophaginae

3. *Halictophagus piperi* BOHART, 1943 (♂, ♀) [Host: *Cicadella longa* — Hemiptera: Cicadellidae] Luzon*
4. *H. steffani* KINZELBACH, 1971 (♂) Tawi Tawi*

Elenchidae

Deinelenchinae

5. *Elencholax noonadanae* KINZELBACH, 1971 (♂) Balabac*

Myrmecolacidae

6. *Lychnocolax mindoro* BOHART, 1951 (♂) Mindoro*, Busuanga, Culion
7. *L. mindanao* BOHART, 1951 (♂) Mindanao*
8. *L. postorbis* BOHART, 1951 (♂) Mindanao*
9. *L. ovatus* BOHART, 1951 (♂) Mindanao*
10. *L. palpalis* BOHART, 1951 (♂) Mindanao*
11. *Myrmecolax philippinensis* BOHART, 1941 (♂) Mindanao*
12. *M. furcatus* BOHART, 1951 (♂) Busuanga*
13. *M. rossi* BOHART, 1951 (♂) Mindoro*
14. *M. culionensis* BOHART, 1951 (♂) Culion*
15. *Stichotrema davao* (BOHART, 1951) (♂) Mindanao*
16. *S. retrorsum* (BOHART, 1951) (♂) Mindanao*

Stylopidae

Xeninae

17. *Paraxenos kurosawai* sp. nov. (♀) [Host: *Sphex* (*Sphex*) *madasummae* — Hymenoptera: Sphecidae] Palawan*
18. *Pseudoxenos schultzei* KIFUNE et MAETA, 1965 (♂, ♀) (= *Macroxenos piercei* SCHULTZE, 1925) [Host: *Rhynchium atrum* — Hymenoptera: Eumenidae] Luzon*
19. *Halictoxenos manilae* PIERCE, 1909 (♀) [Host: *Lasioglossum* (*Evylaeus*) *manilae* — Hymenoptera: Halictidae] Luzon*
20. *H. robbi* PIERCE, 1909 (♀) [Host: *Lasioglossum* (*Evylaeus*) *robbi* — Hymenoptera: Halictidae] Luzon*

Acknowledgements

I am much indebted to Dr. Y. KUROSAWA, National Science Museum, Tokyo, for his kind entrustment of the present material, and to Mr. T. TANO, Fukui, for his kind identification of the host wasp and comments on the related host species.

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